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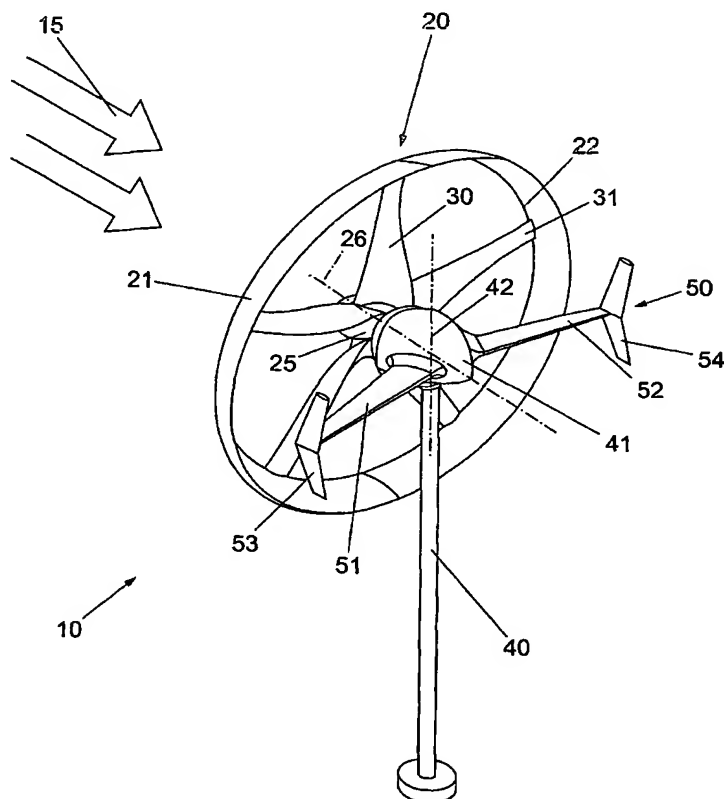
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(54) Title: WIND TURBINE



(57) Abstract: There is described herein a rotor for a wind turbine comprising a plurality of radial blades and a ring-shaped aerofoil diffuser connecting the outer tips of the blades. Further there is described a wind turbine comprising said rotor and further comprising a nacelle and a mounting means adapted to allow rotation of the turbine and rotor about a directional axis perpendicular to the rotational axis, thus allowing the turbine to be oriented in the optimum direction depending on wind conditions. A furling means is disclosed to effect a change in orientation depending on wind speeds. A wind turbine system is also disclosed comprising: a wind turbine driven generator and means for providing a power output, the power output connected to a heating system, a grid-tie inverter or stand alone inverter adapted to supply power to local or grid power infrastructure, or an energy storage system. A method of controlling the level of power taken from a wind turbine; and a wind turbine comprising means for reducing the operating vibrations caused by harmonic resonance within the turbine, tower and mounting structure are also described.



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